

DECLARATION OF ROBERT A. LIEBERMAN

I, Robert A. Lieberman declare as follows:

1. I am an inventor of the invention in patent application 09/730,158 filed on December 5, 2000 (the Application)

2. Briefly my background is:

PhD, physics, University of Michigan 1981.

Bell Laboratories, 1984-1991, member of the technical staff, Glass Research Lab (fiber optic research).

Physical Optics Corporation Inc., 1991-1999, Senior V.P. for R+D, optical fiber sensors.

Intelligent Optical Systems, Inc., 1999 to present, Senior V.P. and Chief Technical Officer, optical fiber sensors.

3. I am qualified to determine the level of skill of a person of ordinary skill in the art that is the subject of the Application.

4. I have reviewed the Office Action dated January 23, 2003 in particular in respect of the Examiner's statement:

"Claim 7-8, 19, 23, and 25 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

These claims recite the parameter that varies from the input end of the fiber to the output end of the fiber in a manner to maintain a constant power loss per unit length being one of the core/cladding refractive index ratio, the absorption coefficient, and the scattering coefficient. This is also recited in the specification of the disclosure (See Page 5), however, one skilled in the art would not be enabled to determine how to vary such parameter and in what manner based on the Applicants' disclosure. The specification additionally provides two purported examples of the claimed invention (See pages 7 and 8 regarding a chemical- and pH-sensitive fiber sensor based on the claimed invention),

however, both these examples fail to describe how the fiber structure or parameters are varied to produce the requisite results of maintaining a constant power loss per unit length."

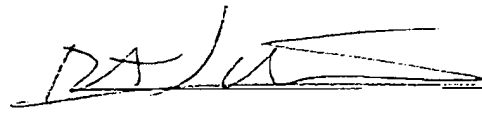
5. I believe that the Examiner is incorrect. A person of ordinary skill in the art would be enabled by the specification to practice (that is to make and/or use) the invention of claims 7 and 8, in particular with reference to the Examiner's position:

a. how to vary the fiber core/cladding refractive index ratio in a manner to maintain a constant power loss per unit length (see claim 7).

b. how to increase the absorption coefficient of the fiber to maintain a constant power loss per unit length (see claim 8).

6. I believe that it is not necessary to respond to the Examiner's rejection under 25 U.S.C. 112 of claims 19, 23, and 25 because those claims do not recite "in a manner to maintain a constant power loss per unit length" which is the basis for the rejection in the Office Action. Insofar as those claims may include variation in a manner to maintain a constant power loss per unit length, in my opinion it is within the level of skill of a person of ordinary skill in the art. Further, taking into account the language of claims 19, 23, and 27, in my opinion the practice of those claims is within the level of skill of a person of ordinary skill in the art.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

 5/23/03

Robert A. Lieberman

Date